

# DEPARTMENT OF TRANSPORTATION

800 BAY ROAD P.O. BOX 778 DOVER, DELAWARE 19903

NICOLE MAJESKI SECRETARY

## **MEMORANDUM**

**TO:** All Users of the Delaware Manual on Uniform Traffic Control Devices

**FROM:** Peter Haag, P.E., PTOE

Chief of Traffic Engineering

**DATE:** January 10, 2022

**SUBJECT: Interim Guidance; Part 3, Markings** 

**Section 3A.06 Regarding Pavement Marking Widths** 

This Interim Guidance to the Delaware Manual on Uniform Traffic Control Devices (MUTCD) provides new guidance to adopt 6" wide normal and 12" wide pavement markings along statemaintained roadways.

Should you have questions concerning the information contained in this Interim Guidance, please contact my office at (302) 659-4060.

#### **Revised Language**

# Section 3A.06 Functions, Widths, and Patterns of Longitudinal Pavement Markings

Revise the following language in Paragraphs 2B and 2C of section 3A.06 as shown below:

#### Guidance:

02B (DE Revision) A normal line along all state-maintained roadways should be 5 6 inches wide.

02C (DE Revision) A wide line along all state-maintained roadways should be 10 12 inches wide.



Interim Guidance; Part 3 January 10, 2022 Page 2 of 2

This Interim Guidance replaces the following figures within Part 3 of the Delaware MUTCD:

| Figure 3A-1A  | Figure 3B-11A |
|---------------|---------------|
| Figure 3A-1B  | Figure 3B-13  |
| Figure 3B-8   | Figure 3B-14  |
| Figure 3B-8A  | Figure 3B-14A |
| Figure 3B-9   | Figure 3B-14B |
| Figure 3B-9A  | Figure 3B-14C |
| Figure 3B-9B  | Figure 3C-1   |
| Figure 3B-10  | Figure 3C-3   |
| Figure 3B-10A | Figure 3C-4   |
| Figure 3B-11  |               |

Concurred By: Mark Luszcz

Deputy Director, Design



Figure 3A-1A. Black Contrast Marking Patterns on Interstates, Freeways or Expressways

(Delaware Revision)

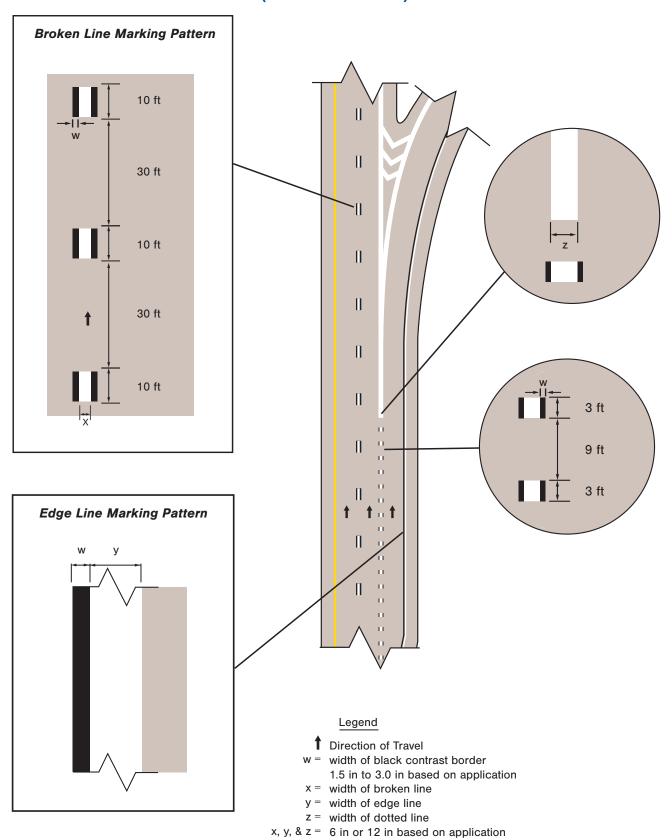


Figure 3A-1B. Black Contrast Marking Patterns on All Other Roads (Non-Interstates, Freeways or Expressways)

(Delaware Revision)

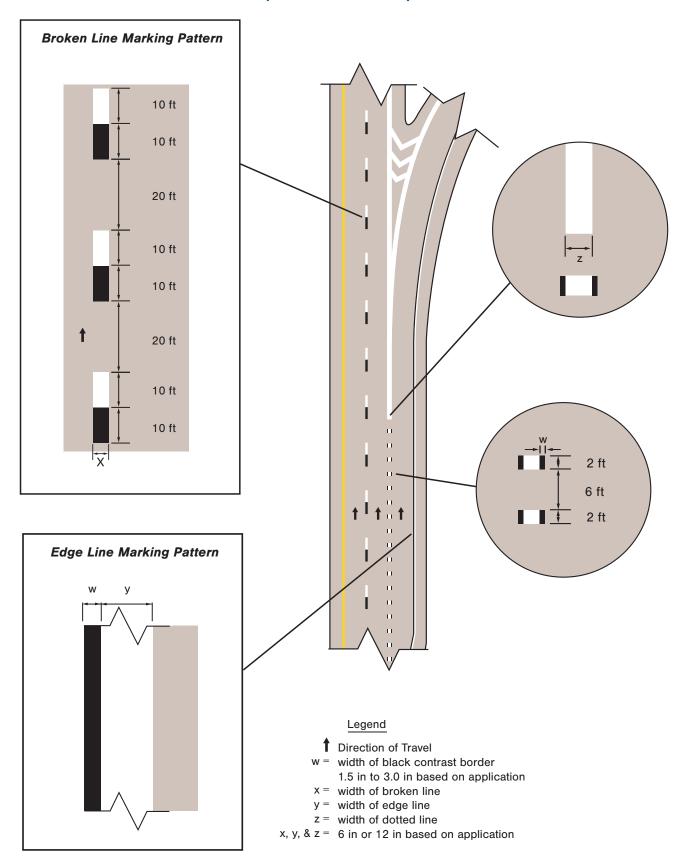


Figure 3B-8. Examples of Dotted Line and Channelizing Line Applications for Exit Ramp Markings along Interstates, Freeways and Expressways (Sheet 1 of 2) (Delaware Revision)

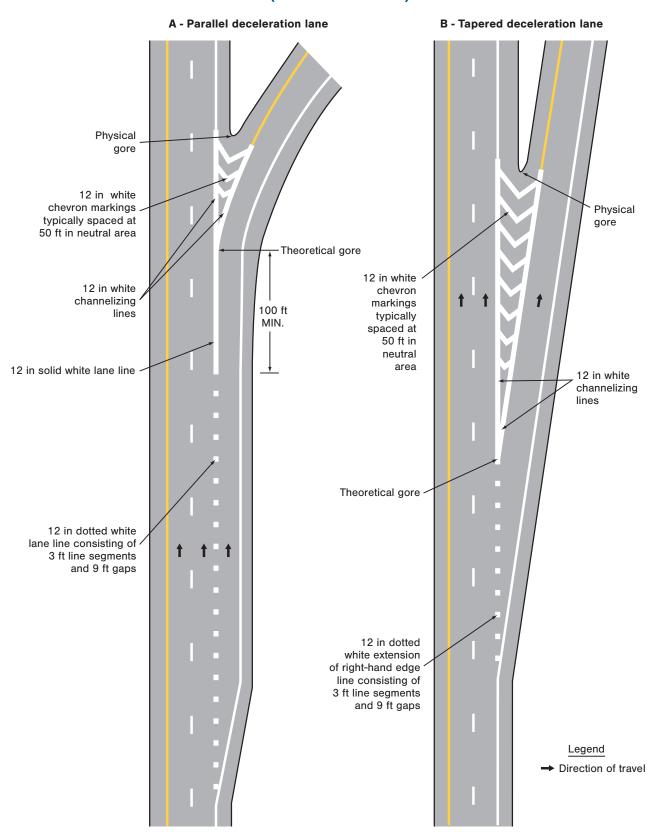


Figure 3B-8. Examples of Dotted Line and Channelizing Line Applications for Exit Ramp Markings along Interstates, Freeways and Expressways (Sheet 2 of 2)

## (Delaware Revision)

C - Parallel deceleration lane at a multi-lane exit ramp having an optional exit lane that also carries the through route

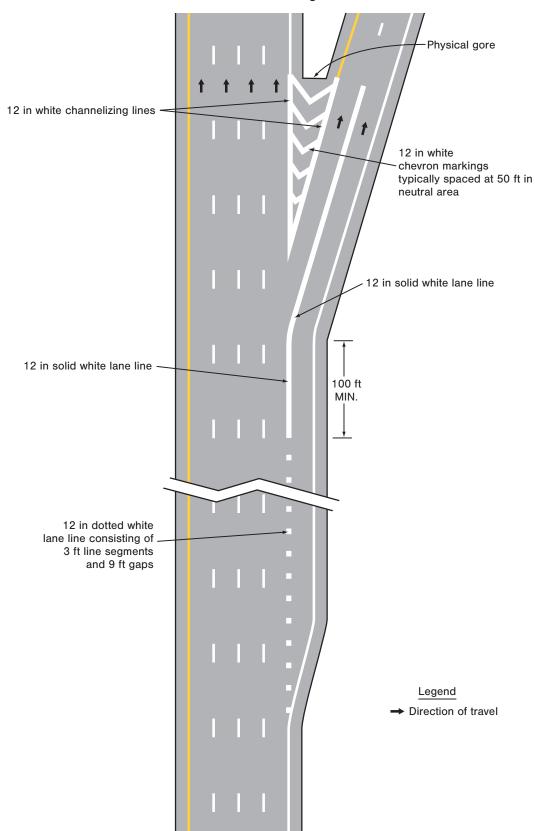


Figure 3B-8A. Examples of Dotted Line and Channelizing Line Applications for Exit Ramp Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 1 of 2) (Delaware Revision)

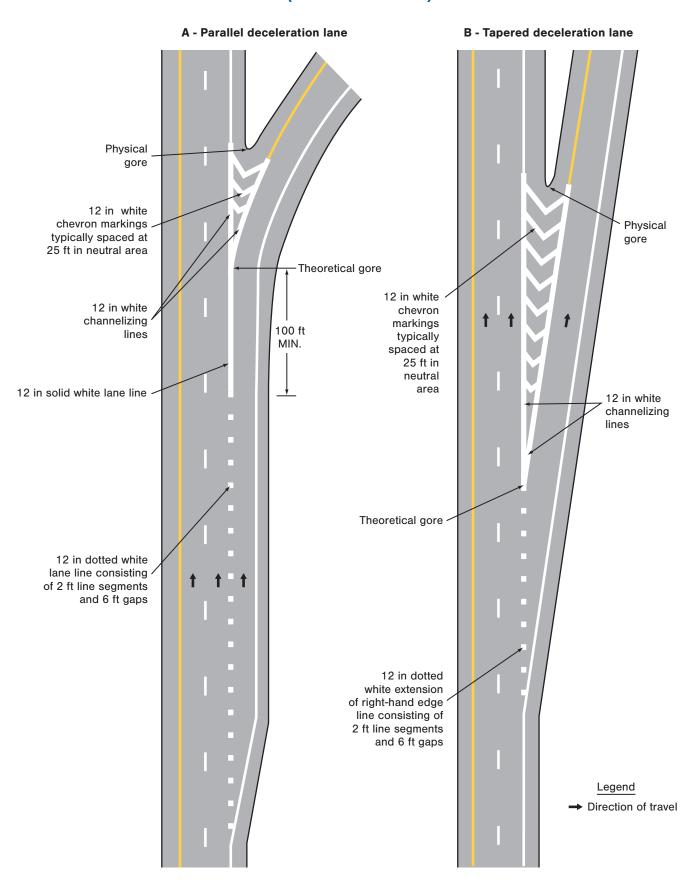


Figure 3B-8A. Examples of Dotted Line and Channelizing Line Applications for Exit Ramp Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 2 of 2) (Delaware Revision)

C - Parallel deceleration lane at a multi-lane exit ramp having an optional exit lane that also carries the through route

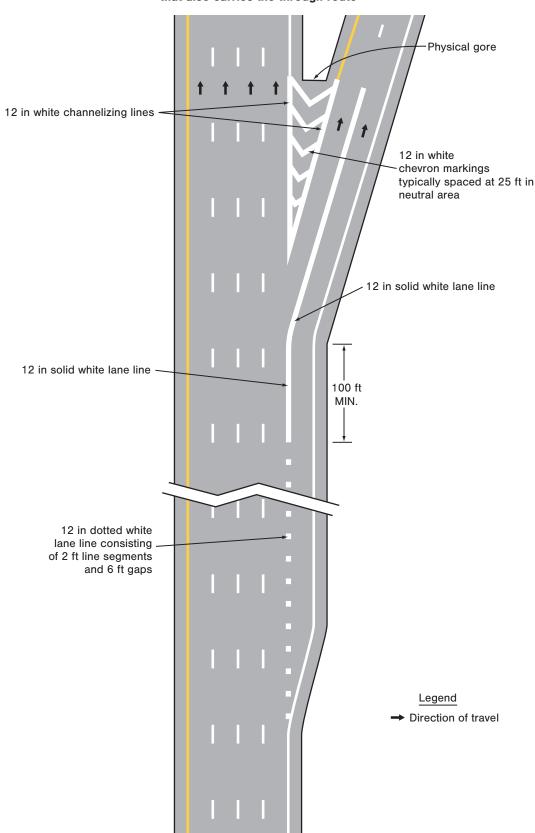


Figure 3B-9. Examples of Dotted Line and Channelizing Line Applications for Entrance Ramp Markings along Interstates, Freeways and Expressways (Delaware Revision)

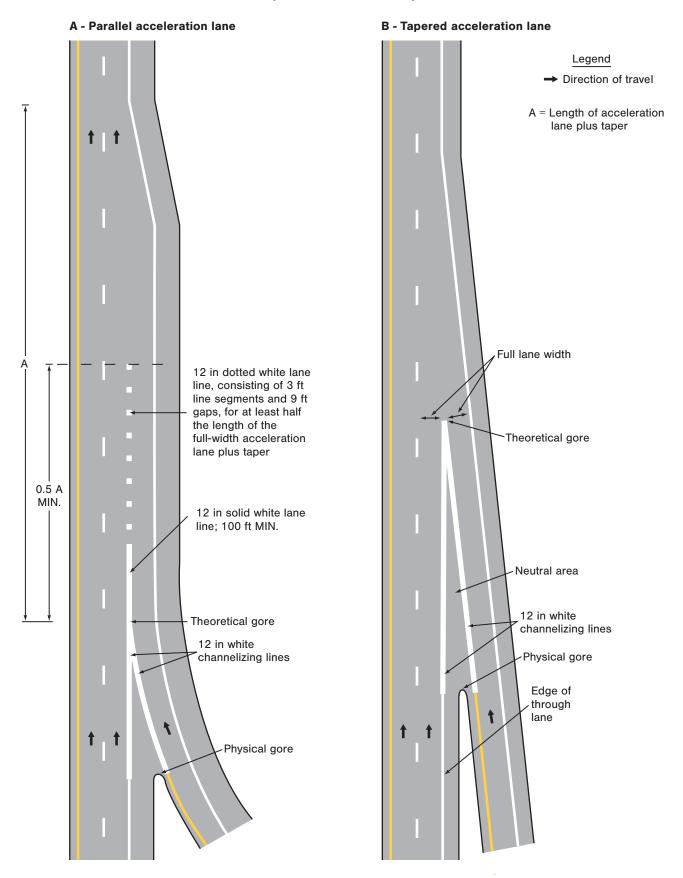


Figure 3B-9A. Examples of Dotted Line and Channelizing Line Applications for Entrance Ramp Markings along All Other Roads (Non-Interstates, Freeways and Expressways)

(Delaware Revision)

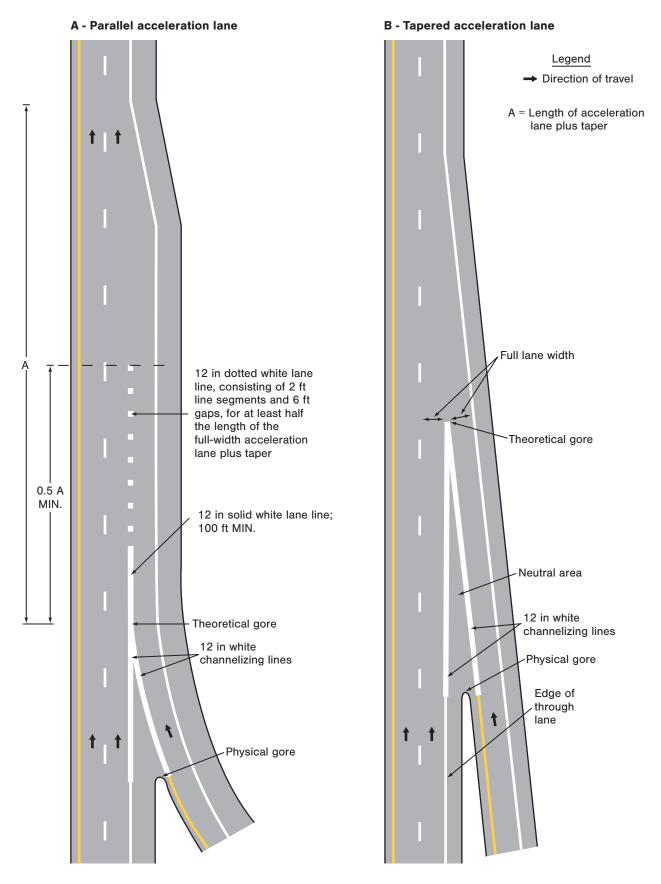


Figure 3B-9B. Example of Channelizing Line Application for Added Lane Entrance Ramp

(Delaware Revision)

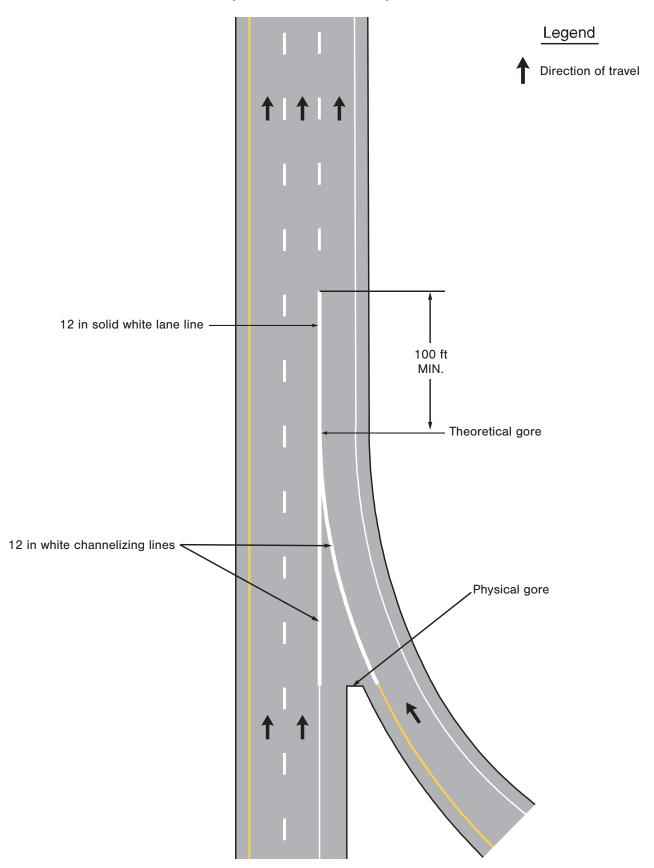


Figure 3B-10. Examples of Applications of Interstate, Freeway and Expressway

Lane-Drop Markings (Sheet 1 of 5)

(Delaware Revision)

A - Lane drop at a single lane exit ramp

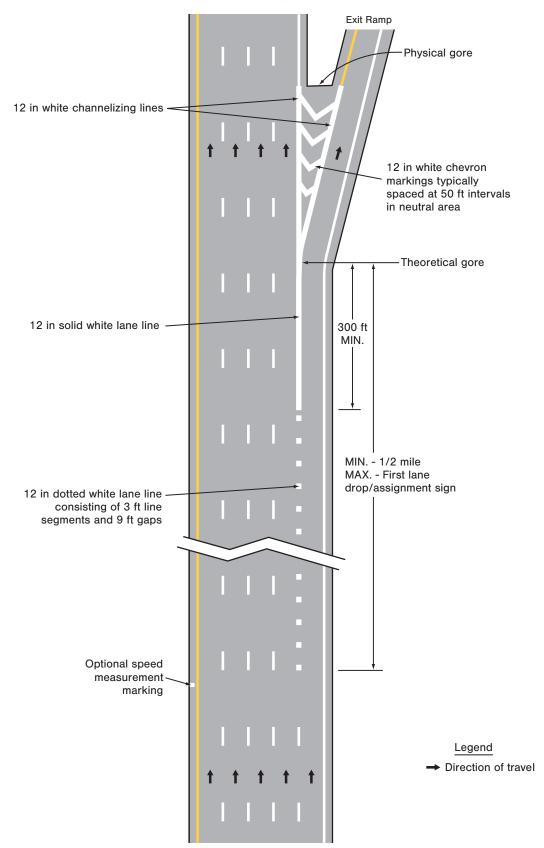


Figure 3B-10. Examples of Applications of Interstate, Freeway and Expressway Lane-Drop Markings (Sheet 2 of 5)

(Delaware Revision)

B - Lane drop at a multi-lane exit ramp having an optional exit lane that also carries the through route

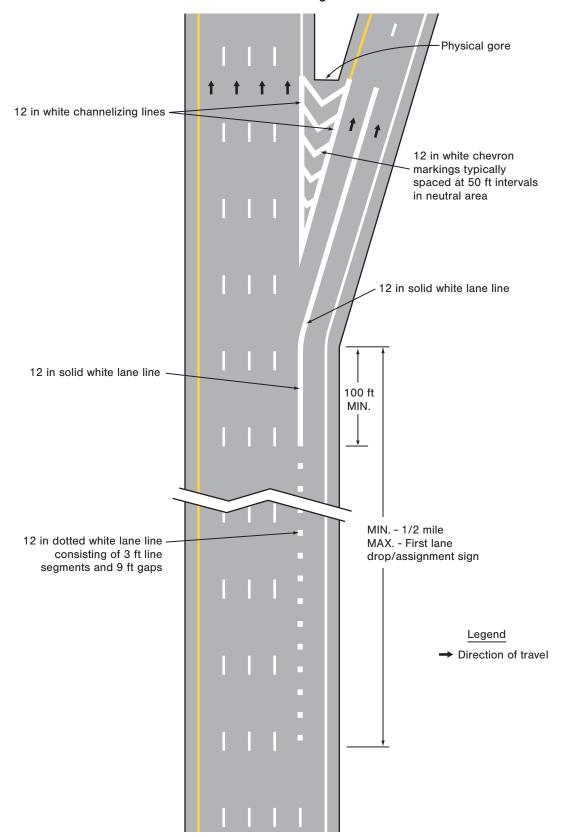


Figure 3B-10. Examples of Applications of Interstate, Freeway and Expressway

Lane-Drop Markings (Sheet 3 of 5)

(Delaware Revision)

C - Two-lane lane drop at an exit ramp

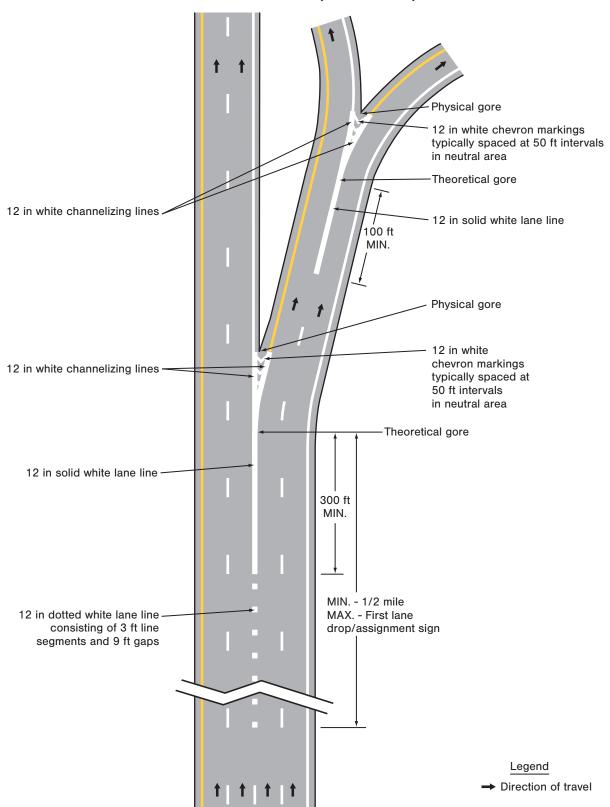


Figure 3B-10. Examples of Applications of Interstate, Freeway and Expressway Lane-Drop Markings (Sheet 4 of 5)

(Delaware Revision)

D - Route split with dedicated lanes

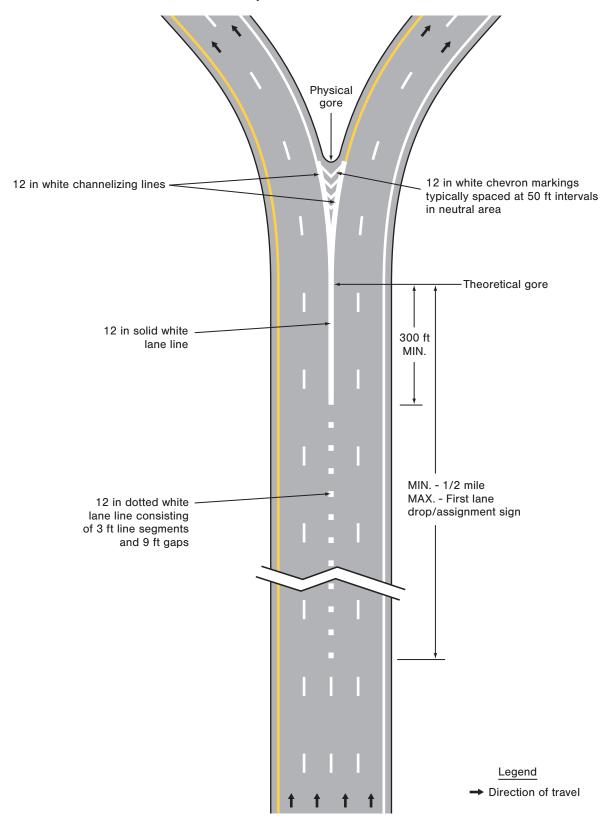


Figure 3B-10. Examples of Applications of Interstate, Freeway and Expressway

Lane-Drop Markings (Sheet 5 of 5)

(Delaware Revision)

E - Auxiliary lane, such as at a cloverleaf interchange

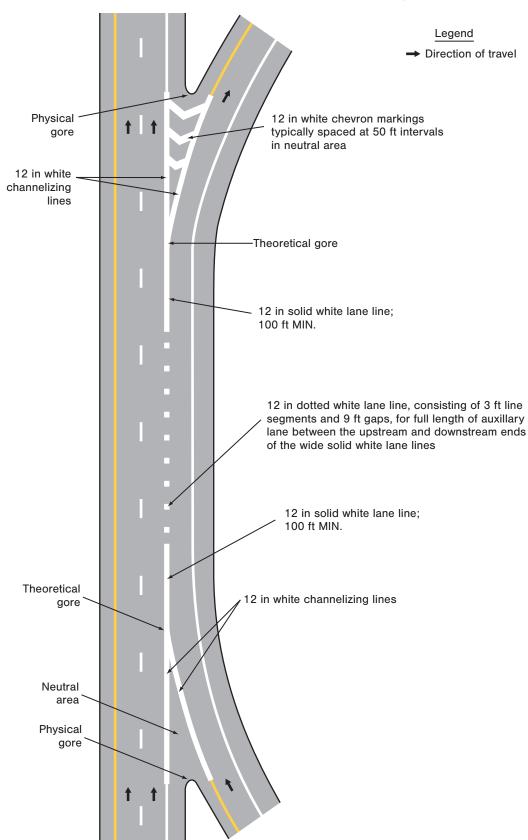


Figure 3B-10A. Examples of Applications of Lane-Drop Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 1 of 5)

(Delaware Revision)

#### A - Lane drop at a single lane exit ramp

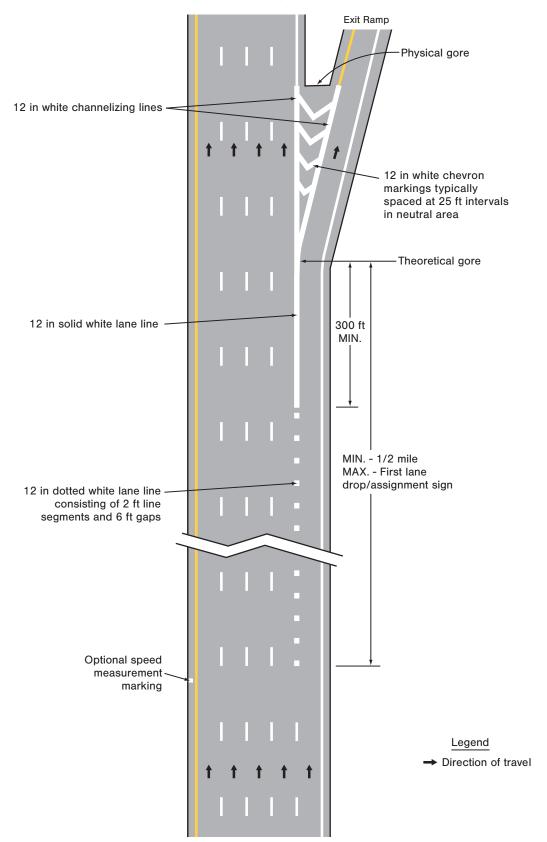


Figure 3B-10A. Examples of Applications of Lane-Drop Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 2 of 5)

(Delaware Revision)

B – Lane drop at a multi-lane exit ramp having an optional exit lane that also carries the through route

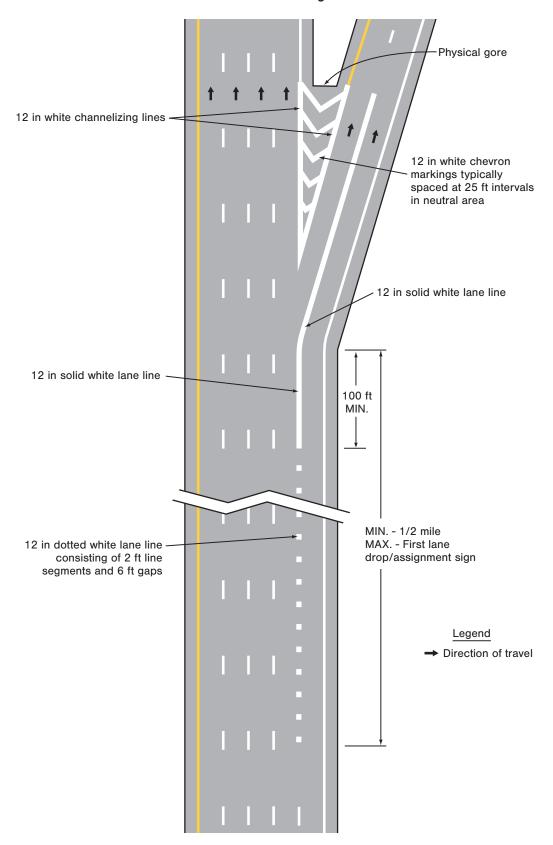


Figure 3B-10A. Examples of Applications of Lane-Drop Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 3 of 5)

(Delaware Revision)

C - Two-lane lane drop at an exit ramp

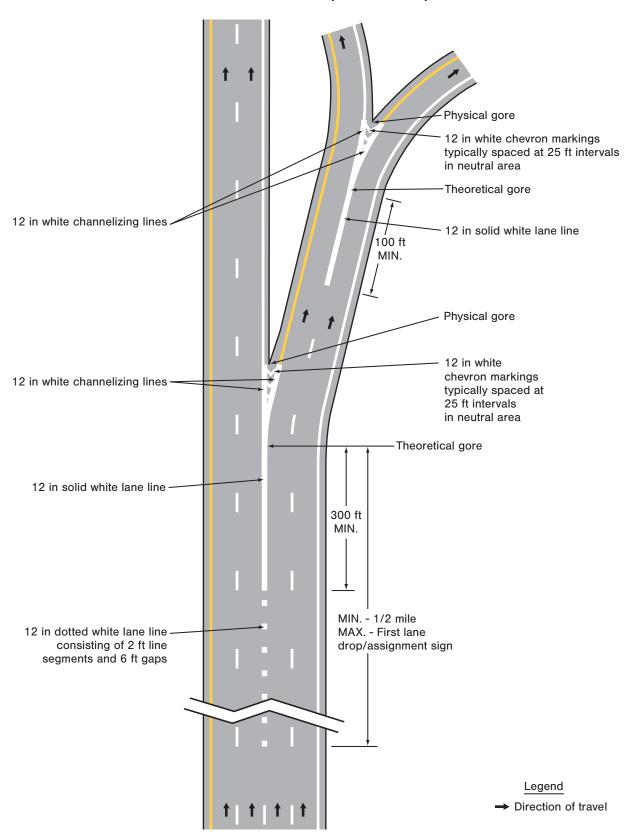


Figure 3B-10A. Examples of Applications of Lane-Drop Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 4 of 5)

(Delaware Revision)

D - Route split with dedicated lanes

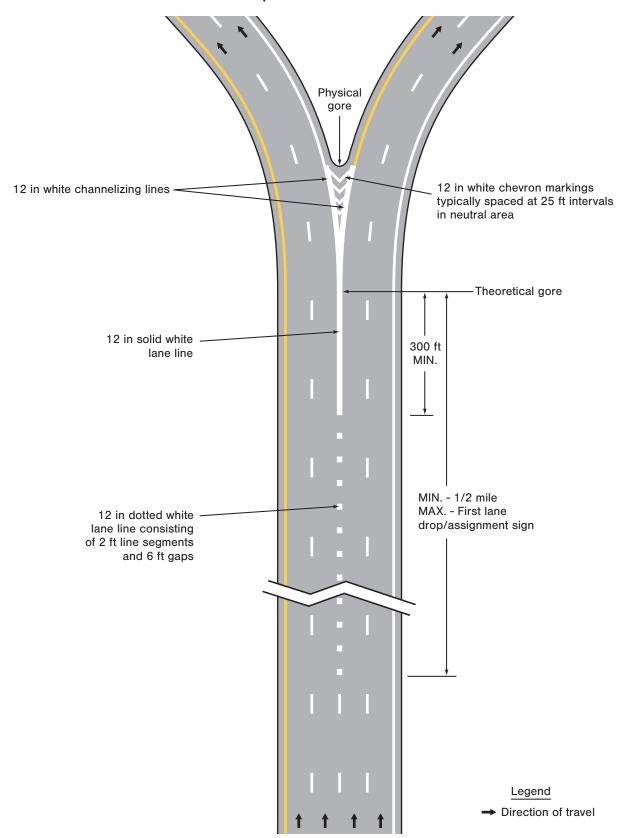


Figure 3B-10A. Examples of Applications of Lane-Drop Markings along All Other Roads (Non-Interstates, Freeways and Expressways) (Sheet 5 of 5)

(Delaware Revision)

#### E - Auxiliary lane, such as at a cloverleaf interchange

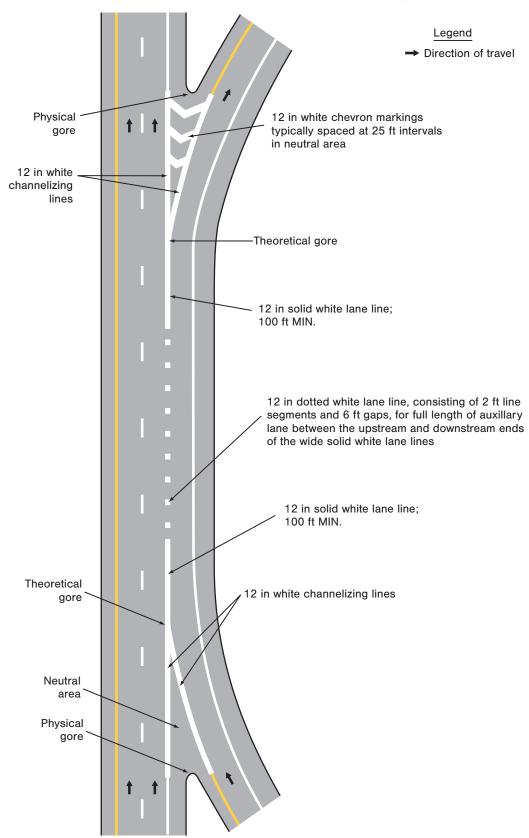


Figure 3B-11. Examples of Applications of Conventional Road Auxiliary

Lane and Lane-Drop Markings (Sheet 1 of 5)

(Delaware Revision)

A - Right-turn lane drop at an intersection (Posted or 85th-percentile speed < 35 MPH)

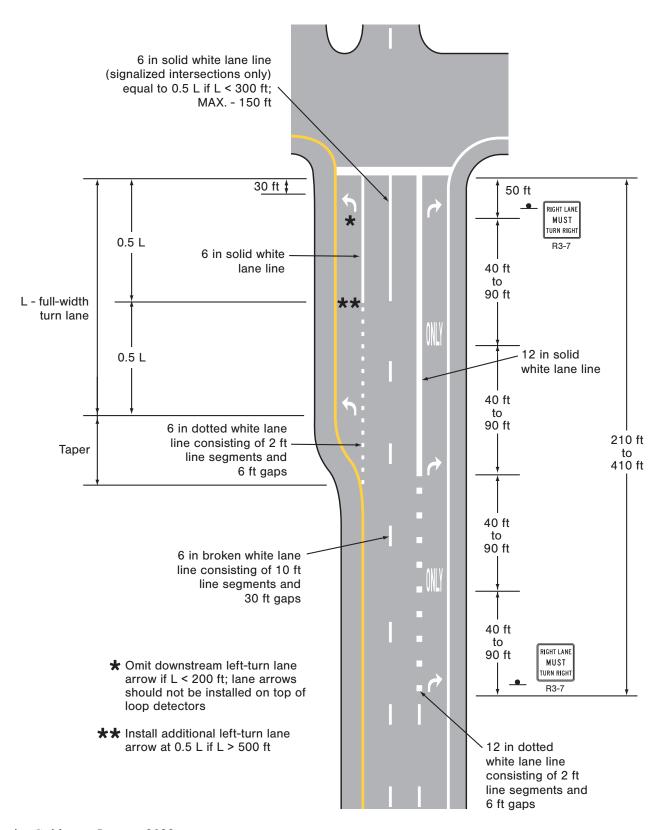


Figure 3B-11. Examples of Applications of Conventional Road Auxiliary

Lane and Lane-Drop Markings (Sheet 2 of 5)

#### (Delaware Revision)

B - Right-turn lane drop at an intersection (Posted or 85th-percentile speed ≥ 35 MPH)

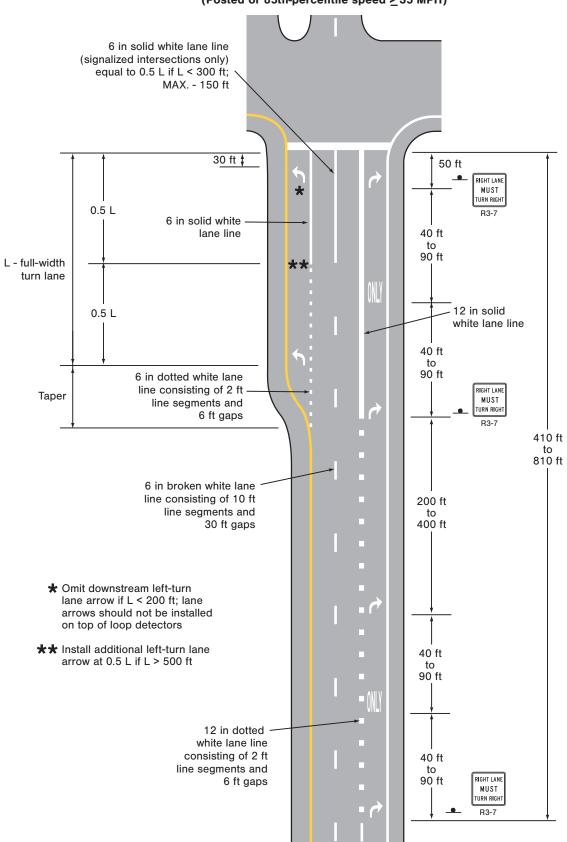


Figure 3B-11. Examples of Applications of Conventional Road Auxiliary Lane and Lane-Drop Markings (Sheet 3 of 5)

#### (Delaware Revision)

C - Auxiliary lane between intersections

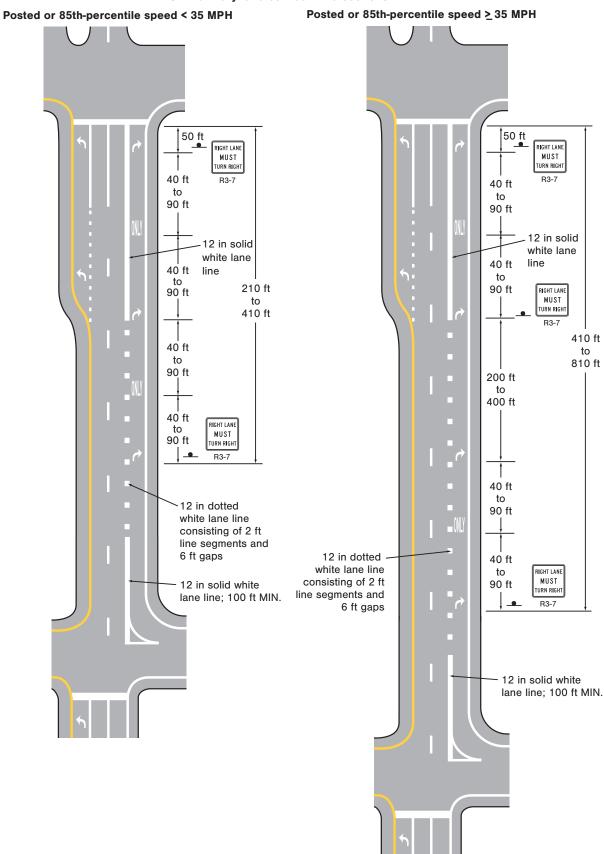


Figure 3B-11. Examples of Applications of Conventional Road **Auxiliary Lane and Lane-Drop Markings** 

(Sheet 4 of 5)

# (Delaware Revision)

D - Exclusive turn lanes at an intersection

- ★ Omit downstream left-turn (or right-turn) lane arrow if  $L_L < 200$  ft (or  $L_R < 200$  ft); lane arrows should not be installed on top of loop detectors
- \*\* Install additional left-turn (or right-turn) lane arrow at 0.5  $L_L$  (or 0.5  $L_R$ ) if  $L_{L} > 500 \text{ ft (or } L_{R} > 500 \text{ ft)}$

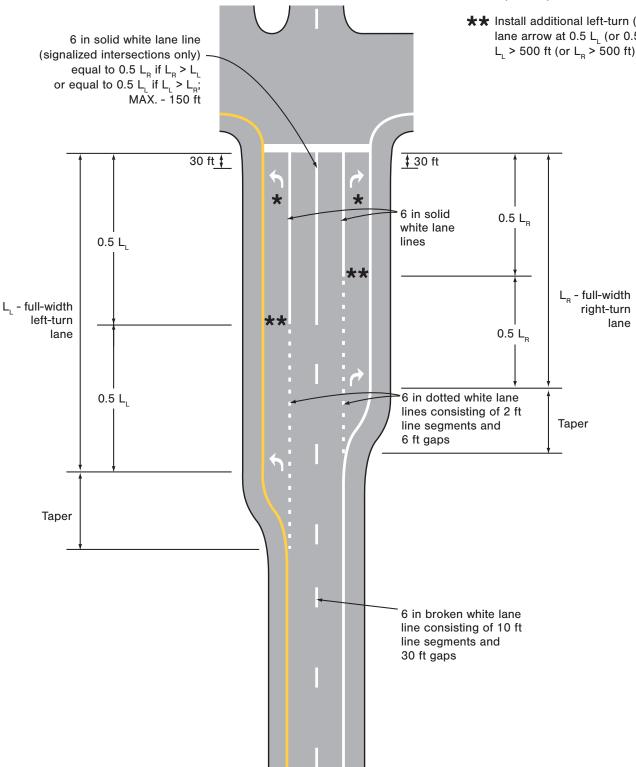


Figure 3B-11. Examples of Applications of Conventional Road Auxiliary Lane and Lane-Drop Markings

(Sheet 5 of 5)

# (Delaware Revision)

E - Two left-turn lanes at an intersection

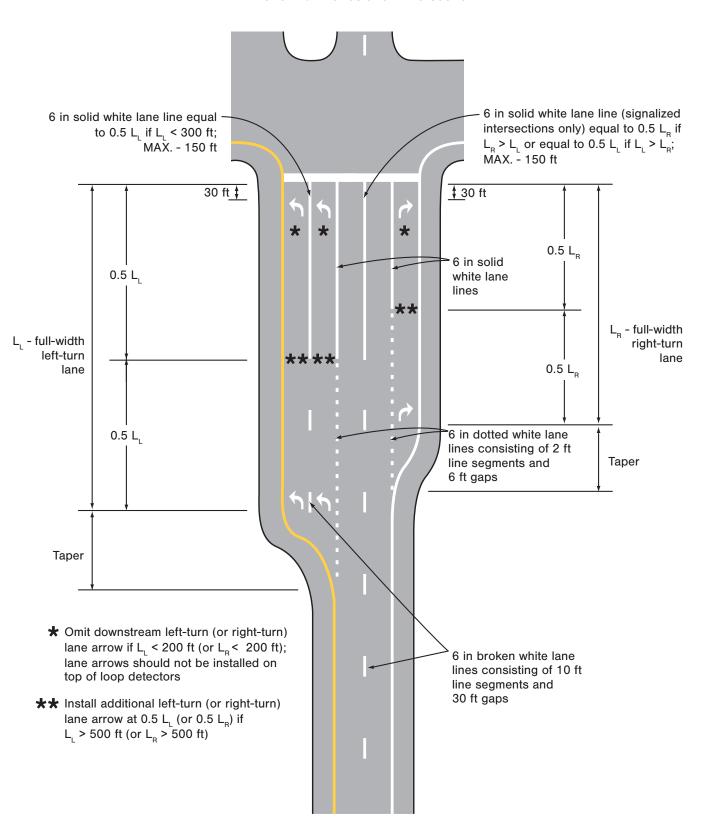


Figure 3B-11A. Example of Auxiliary Lane Lines - Bypass Lane (Delaware Revision)

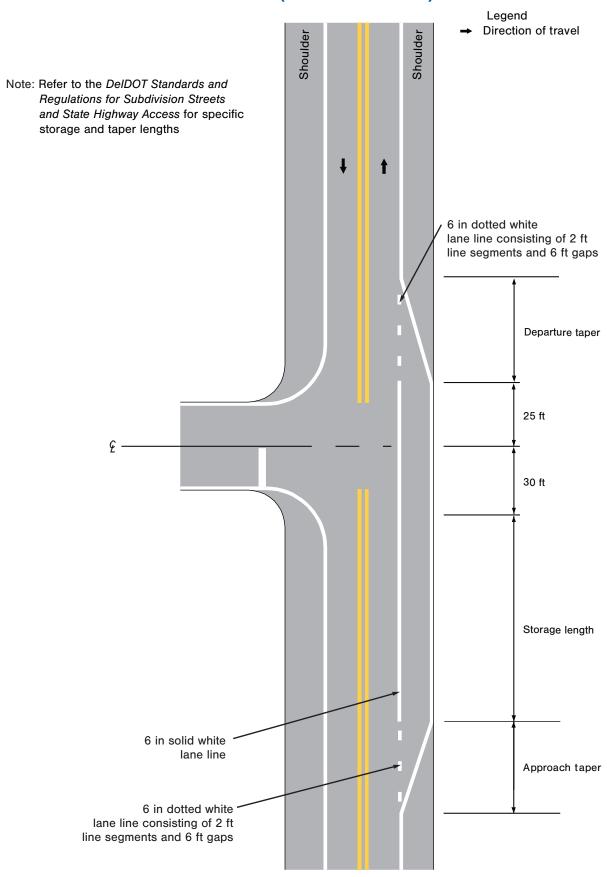
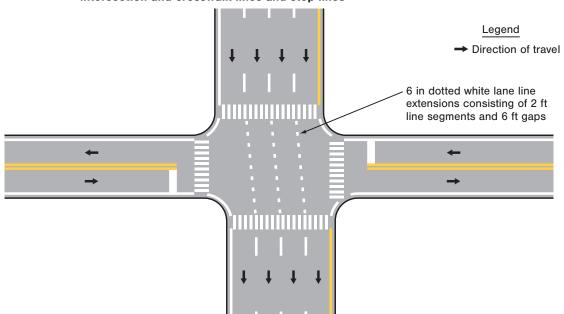


Figure 3B-13. Examples of Line Extensions through Intersections (Sheet 1 of 2) (Delaware Revision)

A - Typical pavement markings with offset lane lines continued through the intersection and crosswalk lines and stop lines



B - Typical pavement markings with double-turn lanes, lane-use turn arrows, and crosswalk lines, stop lines, and line extensions into intersection for double turns

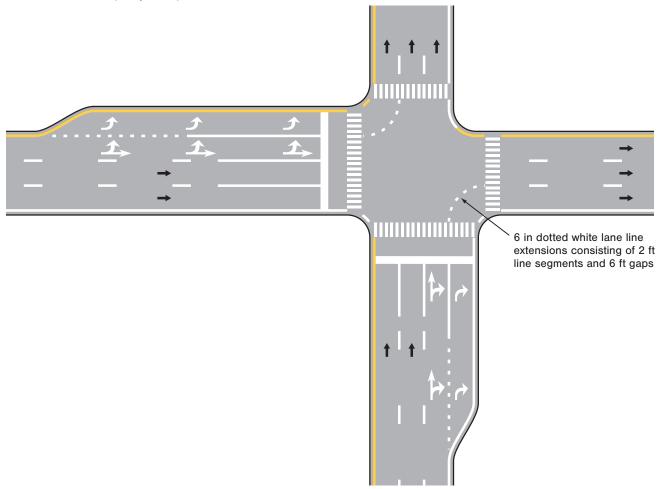
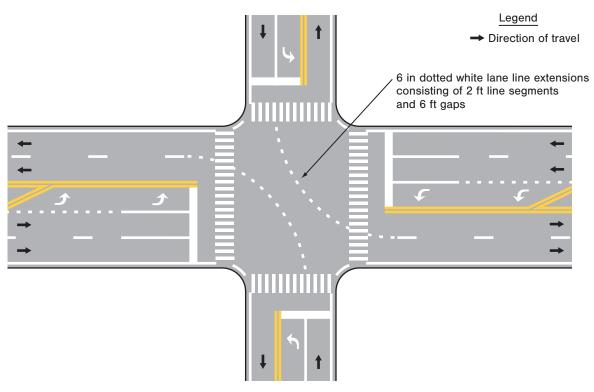


Figure 3B-13. Examples of Line Extensions through Intersections (Sheet 2 of 2) (Delaware Revision)

C - Typical dotted line markings to extend lane line markings into the intersection



D - Typical dotted line markings to extend center line and lane line markings into the intersection

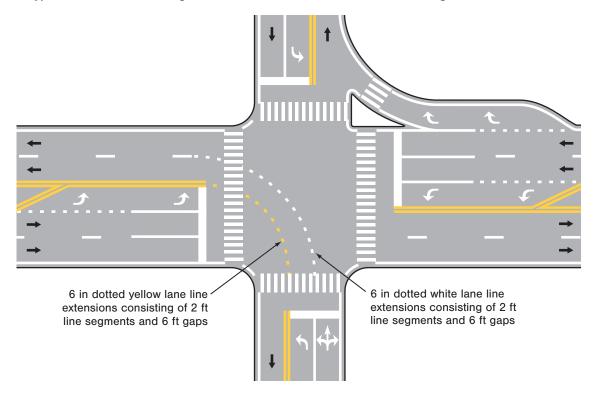
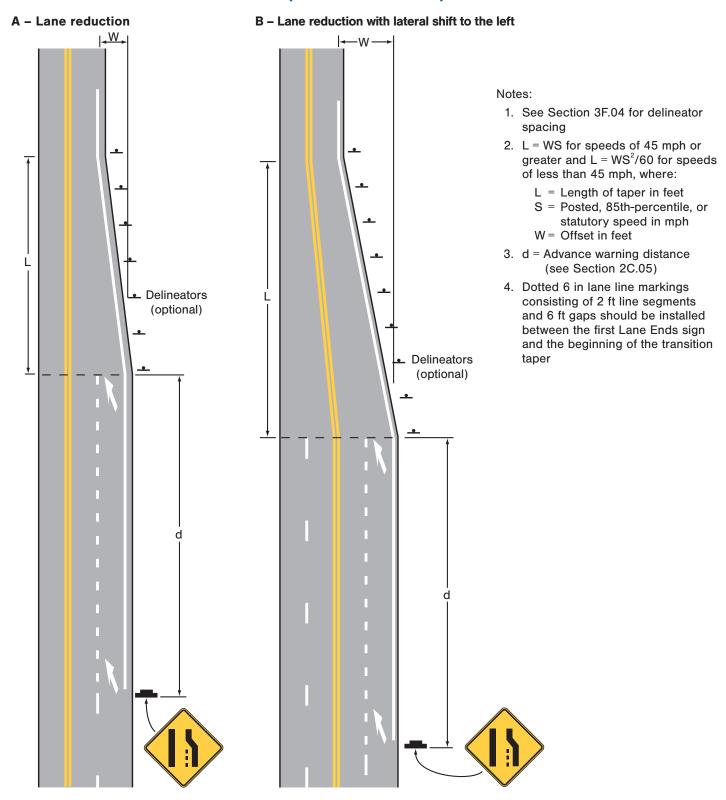


Figure 3B-14. Examples of Applications of Lane-Reduction Transition Markings (Delaware Revision)



# Figure 3B-14A. Example of Lane Reduction Markings for Interstates, Freeways or Expressways (45 MPH or greater)

(Delaware Revision)

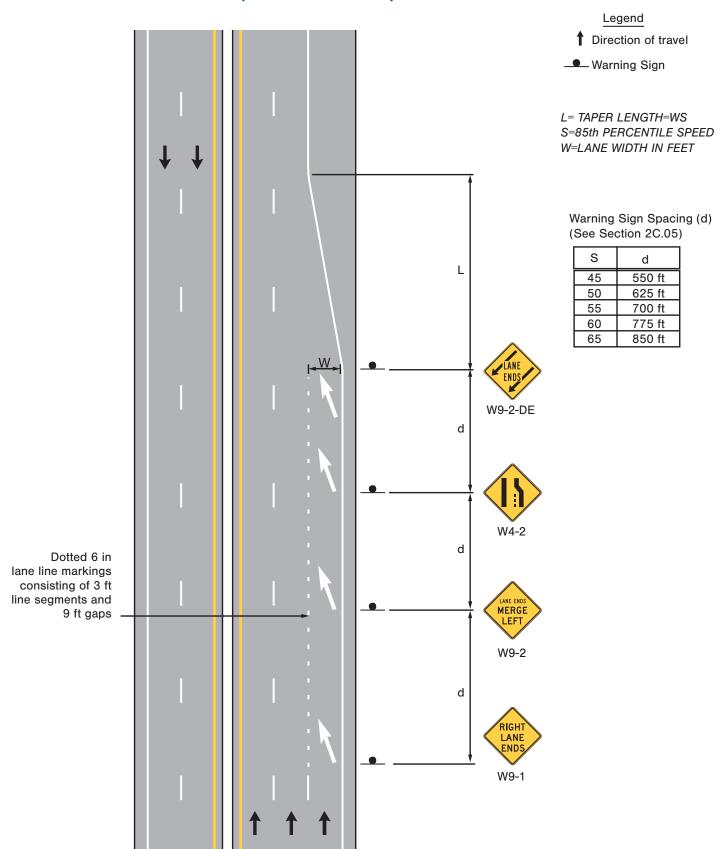


Figure 3B-14B. Example of Lane Reduction Beyond Intersection Marking Application along All Other Roads (Non-Interstates, Freeways or Expressways) (45 MPH or greater) (Delaware Revision)

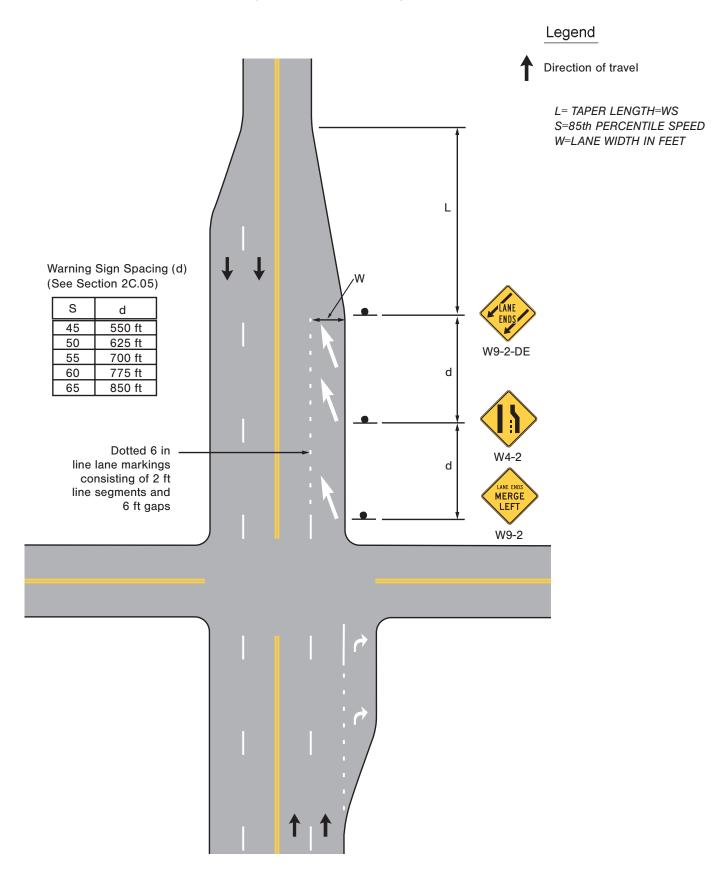
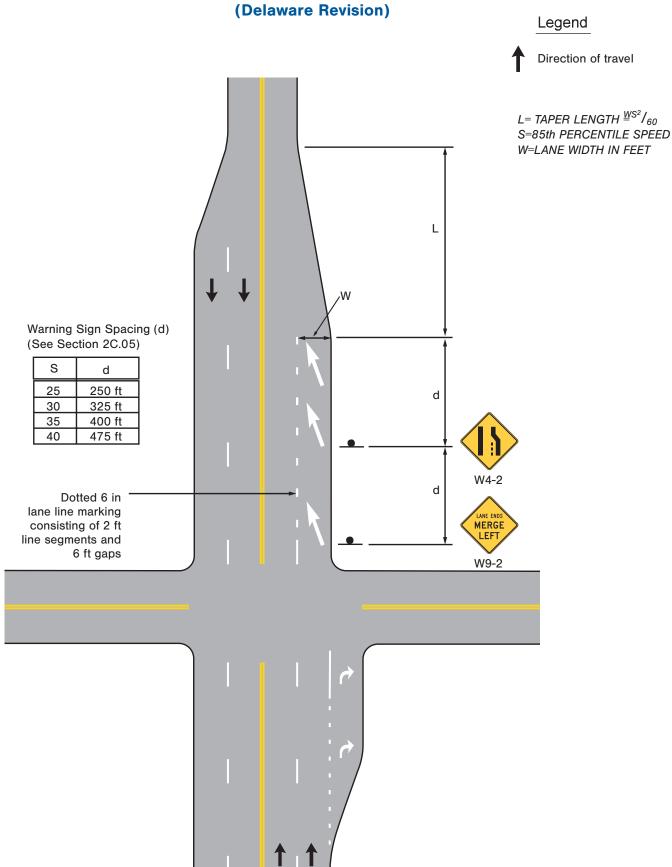


Figure 3B-14C. Example of Lane Reduction Beyond Intersection Marking Application along All Other Roads (Non-Interstates, Freeways or Expressways) (less than 45 MPH)



# **Section 3C.07 Markings for Other Circular Intersections**

## Support:

<sup>01</sup> Other circular intersections include, but are not limited to, rotaries, traffic circles, and residential traffic calming designs.

# Option:

<sup>02</sup> The markings shown in this Chapter may be used at other circular intersections if engineering judgment indicates that their presence will benefit drivers, pedestrians, or other road users.

Figure 3C-1. Example of Markings for Approach and Circulatory Roadways at a Roundabout

(Delaware Revision)

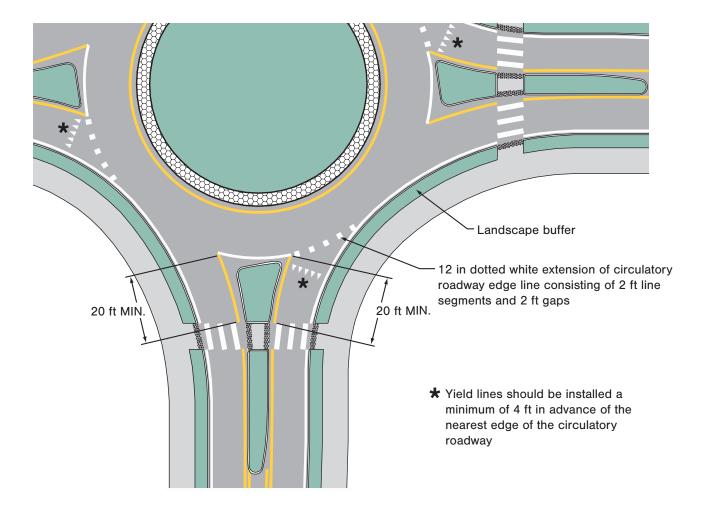


Figure 3C-3. Example of Markings for a One-Lane Roundabout (Delaware Revision)

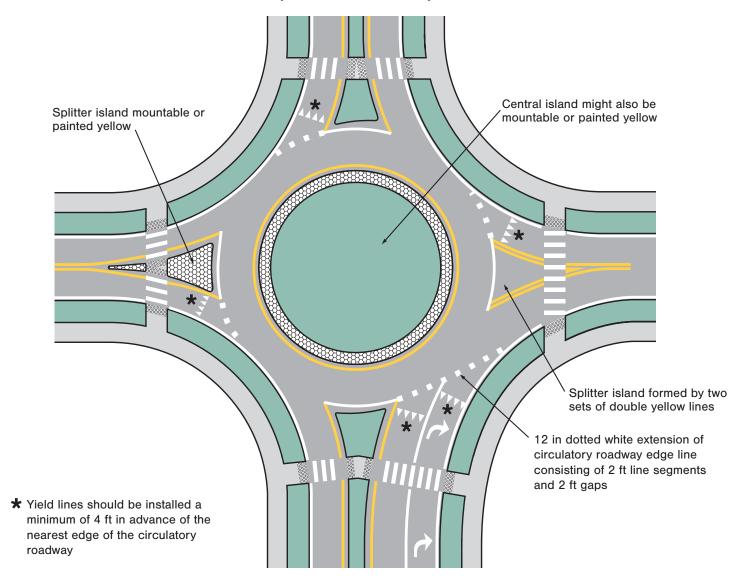


Figure 3C-4. Example of Markings for a Two-Lane Roundabout with One- and Two-Lane Approaches (Sheet 1 of 2)

(Delaware Revision)

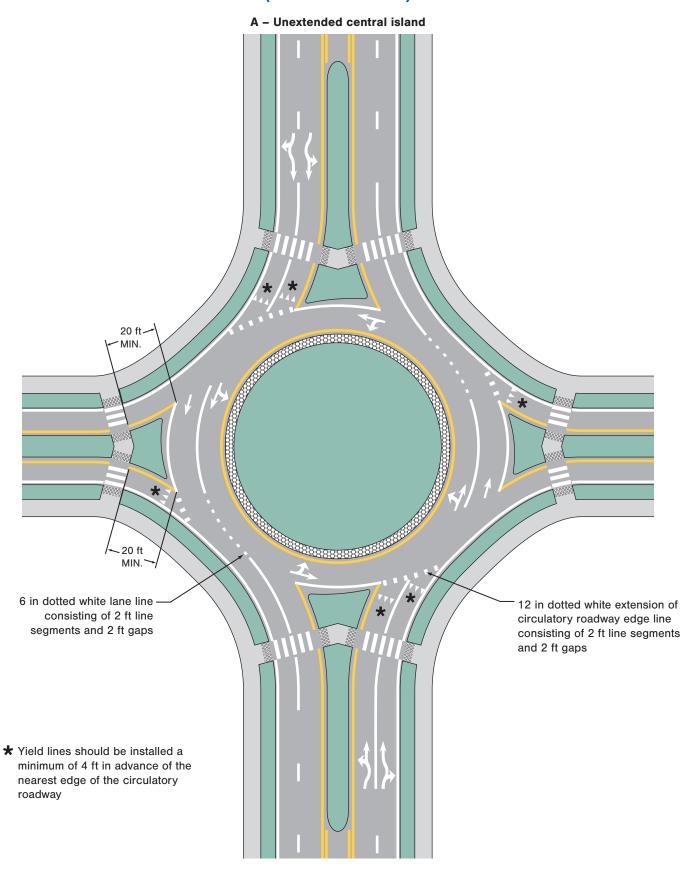
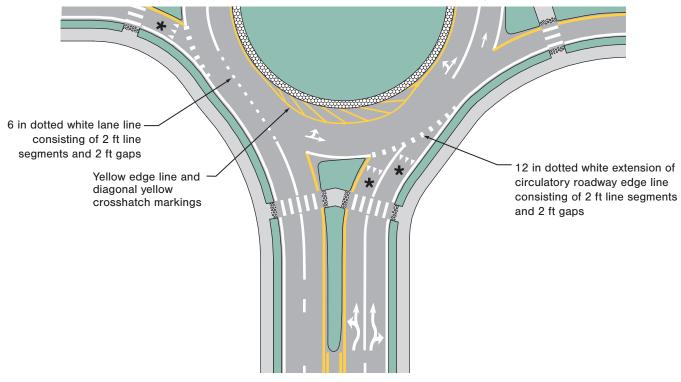


Figure 3C-4. Example of Markings for a Two-Lane Roundabout with One- and Two-Lane Approaches (Sheet 2 of 2)

(Delaware Revision)

#### B - Central island extended by pavement markings



#### C - Central island extended by a truck apron

